

Amendment and Response
Applicant: Trudy L. Benjamin
Serial No.: 10/827,142
Filed: April 19, 2004
Docket No.: 200309559-1
Title: FLUID EJECTION DEVICE

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REMARKS

The following remarks are made in response to the Office Action mailed January 10, 2007. Claims 9-22 have been withdrawn from consideration. Claims 1-8 and 35-57 have been cancelled without prejudice. Claims 23-34 and 58-63 were rejected. Claims 23-34 and 58-63 remain pending in the application and are presented for reconsideration and allowance.

Claim Rejections under 35 U.S.C. § 102 and 35 U.S.C. § 103

Claims 23-25, 27, and 29-34 were rejected under 35 U.S.C. § 102(b) as being anticipated by the Bloomberg, US Patent Application Publication No. 2002/0097287 (divisional of family member 2002/0070998) (the Bloomberg publication).

Claims 26 and 58-63 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Bloomberg Publication in view of Kanematsu et al. US Publication No. 2002/0113832 (the Kanematsu publication).

The Bloomberg publication is directed to a method of printing a subject on a medium by use of a printing device including a printhead assembly that has at least one printhead having an array of marking elements. The printhead assembly is scanned along the medium by a succession of passes, the passes being offset from each other in a direction transverse to a scanning movement of the printhead assembly relative to the medium. Non-textual material of the subject is printed in more than one of the plurality of the passes, and textual material of the subject is printed during only one of the plurality of passes. Examination of print command signals may be made to alter printing protocol based on the presence or absence of color or black.

Applicant respectfully submits that the Bloomberg publication fails to teach or suggest a **fluid ejection device** that includes an address generator, as recited in independent claims 23 and 58. Embodiments and examples of a fluid ejection device in the specification of the present application include a printhead, an inkjet cartridge, a pen, and a printhead assembly. In contrast, in the Bloomberg publication, a printer 20 includes a system computer 40 that applies electrical signals to control a controller 36 that applies electrical signals to motors that move a printhead assembly 24 and a medium 22 (see Figure 1). An address generator 62 controls memory 58 and a buffer store 60 in the system computer 40 (see Figure

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4). The printhead assembly 24 does not include the address generator 62 (see Figure 1 and Figure 4).

The Bloomberg publication also fails to teach or suggest an address generator including first bank circuitry and second bank circuitry, as recited in independent claims 23 and 58. In contrast, in the Bloomberg publication, the address generator 62 is a single block that controls memory and registers in the system computer 40 (see Figure 4).

The Bloomberg publication also fails to teach or suggest first bank circuitry configured to receive a **first group of timing pulses** and second bank circuitry configured to receive a **second group of timing pulses**, as recited in independent claims 23 and 58. In contrast, in the Bloomberg publication, the address generator is responsive to timing signals from the timing unit that also provides signals for synchronizing operation of the controller with the address generator.

In addition, the Bloomberg publication fails to teach or suggest first bank circuitry configured to generate a first sequence of address signals in response to the first group of timing pulses and second bank circuitry configured to generate a second sequence of address signals in response to the second group of timing pulses, as recited in independent claims 23 and 58. In contrast, in the Bloomberg publication, the address generator is responsive to timing signals from the timing unit and has individual control of the times of imprinting the various colors and black at each of the sites of the various pixels of the subject to be printed, which printing can take place in a pseudo-random fashion or other manner.

The Bloomberg publication fails to teach or suggest first bank circuitry configured to generate a first sequence of address signals adapted to **enable** the first group of fluid ejection elements, or adapted to **enable** the first group of resistors to conduct and second bank circuitry configured to generate a second sequence of address signals adapted to **enable** the second group of fluid ejection elements or adapted to **enable** the second group of resistors to conduct, as respectively recited in independent claims 23 and 58. In contrast, in the Bloomberg publication, **data** is read out of the memory in response to signals of the address generator to be stored in respective ones of the registers of the buffer store, and to be read out from these registers in response to signals applied to the registers from the address generator. For the printing of any one of the colors at the site of a pixel it is necessary to provide only a one-bit signal to indicate the presence or absence of a dot to be printed on the medium.

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Registers store a series of digits, one for each pixel in a line of pixels to be printed, wherein the presence of a logic 1 or a logic 0 indicates the presence or absence of a color at a pixel or serves as a command signal for the inkjet.

In view of the above, Applicant submits that all features of independent claim 23 and all features of independent claim 58 are not taught or suggested by the Bloomberg publication or the Kanematsu publication alone or in combination.

Furthermore, as dependent claims 24-34 further define patentably distinct independent claim 23 and dependent claims 59-63 further define patentably distinct independent claim 58, these dependent claims are also believed to be allowable.

Therefore, Applicant respectfully requests reconsideration and withdrawal of the 35 U.S.C. § 102 and the 35 U.S.C. § 103 rejections to claims 23-34 and 58-63 and allowance of all pending claims 23-34 and 58-63.

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CONCLUSION

In view of the above, Applicant respectfully submits that pending claims 23-34 and 58-63 are in form for allowance and are not taught or suggested by the cited references. Therefore, reconsideration and withdrawal of the rejections and allowance of claims 23-34 and 58-63 are respectfully requested.

No fees are required under 37 C.F.R. 1.16(h)(i). However, if such fees are required, the Patent Office is hereby authorized to charge Deposit Account No. 08-2025.

The Examiner is invited to contact the Applicant's representative at the below-listed telephone numbers to facilitate prosecution of this application.

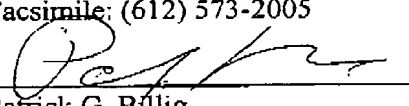
Any inquiry regarding this Amendment and Response should be directed to either Patrick G. Billig at Telephone No. (612) 573-2003, Facsimile No. (612) 573-2005 or Don Coulman at Telephone No. (541) 715-1694, Facsimile No. (541) 715-8581. In addition, all correspondence should continue to be directed to the following address:

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Respectfully submitted,

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Date: April 10, 2007
PGB:hsf:dmw


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CERTIFICATE UNDER 37 C.F.R. 1.8:

The undersigned hereby certifies that this paper or papers, as described herein, are being transmitted via facsimile to Facsimile No. (571) 273-8300 on this 10th day of April, 2007.

By: 
Name: Patrick G. Billig